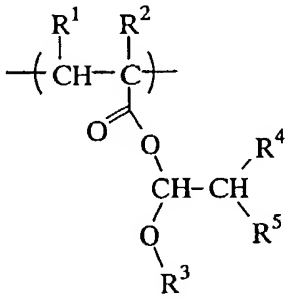
CLAIMS:

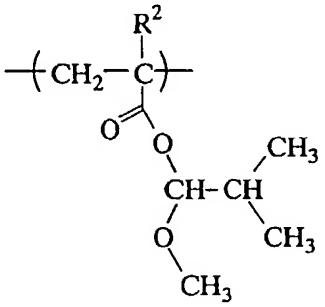
1. A resist composition comprising a polymer comprising recurring units of the following general formula (1) and having a weight average molecular weight of 1,000 to 500,000,



(1)

wherein R^1 and R^2 are each independently hydrogen, hydroxy, a straight or branched alkyl group, halogen atom or trifluoromethyl group, R^3 is methyl or ethyl, R^4 and R^5 each are an alkyl group having 1 to 7 carbon atoms, or R^4 and R^5 may bond together to form a cyclic structure.

2. A resist composition comprising a polymer comprising recurring units of the following general formula (2) and having a weight average molecular weight of 1,000 to 500,000,



(2)

wherein R^2 is hydrogen, hydroxy, a straight or branched alkyl group, halogen atom or trifluoromethyl group.

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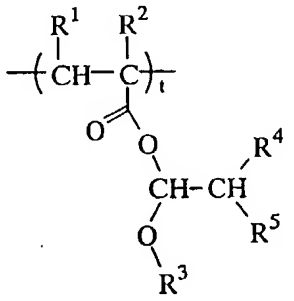
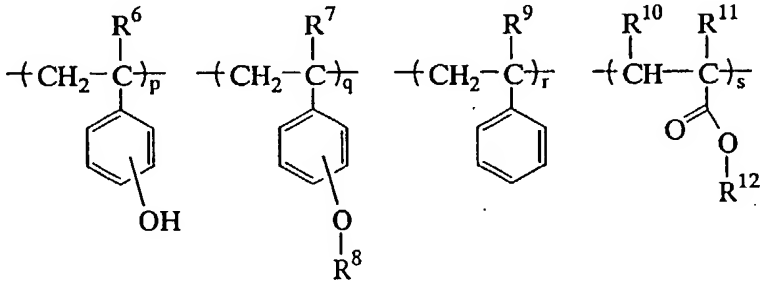
3. A resist composition comprising a polymer comprising recurring units of the following general formula (1) and recurring units of the following general formula (3) and having a weight average molecular weight of 1,000 to 500,000,



(1)

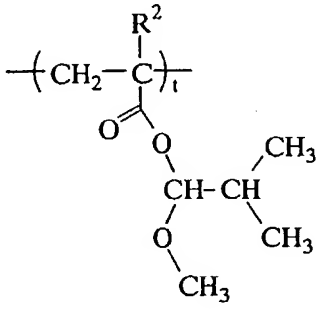
wherein R^1 and R^2 are each independently hydrogen, hydroxy, a straight or branched alkyl group, halogen atom or trifluoromethyl group, R^3 is methyl or ethyl, R^4 and R^5 each are an alkyl group having 1 to 7 carbon atoms, or R^4 and R^5 may bond together to form a cyclic structure, t is a positive number,



(3)

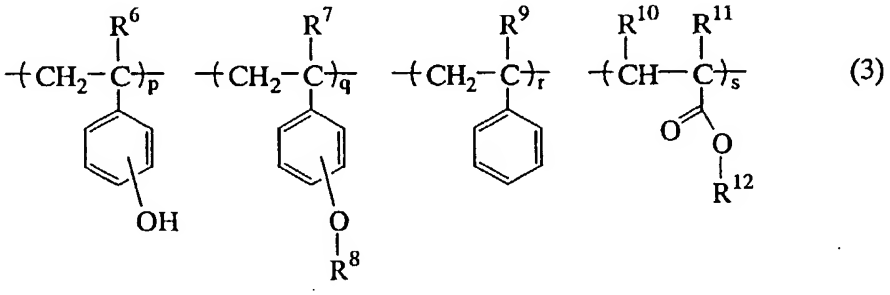
wherein R^6, R^7, R^9, R^{10} and R^{11} are each independently hydrogen, hydroxy, a straight or branched alkyl group, halogen atom or trifluoromethyl group, R^8 is an alkyl group having 1 to 10 carbon atoms, R^{12} is an alkyl group having 4 to 30 carbon atoms or silicon-substituted alkyl group, q, r and s are 0 or positive numbers, and p is a positive number.

4. A resist composition comprising a polymer comprising recurring units of the following general formula (2) and recurring units of the following general formula (3) and having a weight average molecular weight of 1,000 to 500,000,



(2)

wherein R^2 is hydrogen, hydroxy, a straight or branched alkyl group, halogen atom or trifluoromethyl group, and t is a positive number,



(3)

wherein R^6, R^7, R^9, R^{10} and R^{11} are each independently hydrogen, hydroxy, a straight or branched alkyl group, halogen atom or trifluoromethyl group, R^8 is an alkyl group having 1 to 10 carbon atoms, R^{12} is an alkyl group having 4 to 30 carbon atoms or silicon-substituted alkyl group, q, r and s are 0 or positive numbers, and p is a positive number.

5. A chemically amplified positive resist composition comprising

(A) an organic solvent,

(B) the polymer of claim 1 as a base resin, and

(C) a photoacid generator.

6. A chemically amplified positive resist composition comprising

(A) an organic solvent,

(B) the polymer of claim 1 as a base resin,

(C) a photoacid generator, and

(D) a dissolution inhibitor.

7. The chemically amplified positive resist composition of claim 5, further comprising (E) a basic compound.

8. A process for forming a resist pattern comprising the steps of:

applying the resist composition of claim 1 onto a substrate to form a coating,

heat treating the coating and then exposing it to high-energy radiation or electron beam through a photo mask, and

optionally heat treating the exposed coating and developing it with a developer.